

Applicable to ACOE's Dredge and Fill Projects

If project activities are being conducted in the dry and all of my best management practices are operating effectively, do I still need to conduct turbidity monitoring?

No. Work conducted in the dry will not cause a visible sediment plume, which is the trigger for conducting turbidity monitoring.

When am I required to conduct turbidity monitoring?

Turbidity monitoring is required when project activities result in a discharge into waters of the United States that cause a visible sediment plume.

Why is monitoring required?

Section 401 of the Clean Water Act requires the state to review federal permits to ensure that they comply with state water quality standards. Idaho water quality standards require that turbidity "shall not exceed background turbidity by more than fifty (50) NTU¹ instantaneously or more than twenty-five (25) NTU for more than ten (10) consecutive days" (IDAPA 58.01.02.250.02.e). Monitoring is required to ensure that the turbidity standard is met. The following *steps should be followed to ensure compliance with the turbidity standard:*

- 1) If a visible plume is observed, quantify the plume by collecting turbidity measurements² from within the plume and compare the results to Idaho's instantaneous numeric turbidity criterion (50 NTU over the background, i.e. upstream of discharge). The <u>appropriate locations</u> to collect measurements are immediately upstream of the discharge and downstream within the plume, as close to the discharge point as is practicable. Both samples must be taken as near to the same time as practicable in order to obtain meaningful and representative results.
- 2) If downstream turbidity is less than 50 NTU greater than the upstream (background) turbidity; continue monitoring as long as the plume is visible.
- 3) If downstream turbidity exceeds upstream (background) turbidity by more than 50 NTU at any time, stop all earth disturbing construction activities and proceed as follows:
 - a) Take immediate action to address the cause of the exceedance. That should include inspecting the condition of project Best Management Practices (BMPs). If the BMPs are functioning properly, then the permittee must modify project activities and/or implement additional BMPs to correct the exceedance.
 - b) Notify the appropriate DEQ regional office within 24 hours.

¹ NTU (nephelometric turbidity unit) is a unit of measure of the concentration of suspended particles in the water. It is determined by shining a light through a sample and measuring the incident light scattered at right angles from the sample.

² A properly and regularly calibrated turbidimeter is required for measurements analyzed in the field (preferred method), but grab samples may be collected and taken to a laboratory for analysis. Contact a laboratory to determine appropriate sampling methods.

- c) Increase monitoring frequency until State water quality standards are met.
- d) Once turbidity is less than 50 NTUs above background resume construction activities. See step 2.

Copies of turbidity monitoring records must be available to DEQ upon request. The log must include background measurements (in NTUs); down-current measurements, comparison of background and down-current monitoring as a numeric value (in NTUs), and latitude/longitude, time and date for each sampling event. Monitoring records must describe all exceedances and subsequent actions taken to correct the violations, including monitoring and the effectiveness of the action (s) taken.

If I discharge to a ditch, canal, or some other man-made water body, am I still responsible for conducting turbidity monitoring?

The permittee is responsible for obtaining permission to discharge to a man-made water body from the owner/operator of the conveyance system. If project activities were to be conducted in the dry, the potential to create a visible plume would be eliminated and turbidity monitoring would not be required.

What if no accessible upstream/downstream monitoring locations exist? Would visual monitoring be acceptable in these instances?

If there is a situation where the permittee cannot access the desirable monitoring location, they would be expected to access the nearest accessible point possible. Visual monitoring is not acceptable when there is a discharge to waters of the United States. Monitoring data is needed in order to determine whether you are meeting the numeric standard of 50 NTU instantaneously and 25 NTU for more than ten consecutive days over the background turbidity. If assistance is needed, the permittee could always contact the appropriate DEQ regional office (Table 1).

Table 1. Idaho DEO Regional Office Contacts

Regional Office	Phone Number	Email
Boise	208-373-0550	julia.achabal@deq.idaho.gov
Coeur d'Alene	208-769-1422	june.bergquist@deq.idaho.gov
Idaho Falls	208-528-2650	troy.saffle@deq.idaho.gov
Lewiston	208-799-4370	mark.sellet@deq.idaho.gov
Pocatello	208-236-6160	greg.mladenka@deq.idaho.gov
Twin Falls	208-736-2190	balthasar.buhidar@deq.idaho.gov

For questions or concerns regarding the information contained in this FAQ sheet, please contact don.essig@deq.idaho.gov